Proposal for a Global Fund for Women through Innovative Finance*

Nilüfer Cagatay† and Bilge Erten‡

Abstract

Despite the spread of budget initiatives for gender equality following the Beijing Declaration of 1995, the resources allocated for eliminating gender inequalities remain inadequate. This paper proposes to create a "Global Fund for Women" with the ability to raise funds through "innovative sources of finance" on a scale more appropriate to the estimated requirements of making reasonable progress toward gender equality (US$31-US$107 billion per year in constant 2014 dollars). It builds on previous calls by feminist economists for the establishment of such funds through global forms of taxation. Since donors’ commitments only meet the lower bound, the Global Fund for Women could scale up funding for gender equality interventions commensurate with country needs. Global resource mobilization through innovative mechanisms, including allocations of new Special Drawing Rights, currency transaction taxes, and carbon taxes, have the potential to provide the necessary financing at a much faster pace than is currently possible.

Keywords: Gender mainstreaming, gender equity, human rights, international financial institutions, women's agency, economic policy

JEL Classification: J16, J18, E62

* For their comments and suggestions, we would like to thank Gunseli Berik, seminar participants at the Gender and Macroeconomics International Working Group Workshops, and three anonymous referees. All errors are, of course, our own.
† Professor, Department of Economics, University of Utah, 201 Presidents Cir, Salt Lake City, UT 84112.
nil.cagatay@gmail.com.
‡ Address for Correspondence: Department of Economics, 43 Leon Street, 312A Lake Hall, Northeastern University, Boston, MA 02115. Phone (office): (617) 373 6275. b.erten@neu.edu.
1. Introduction

Recently there has been a renewed interest in international policy circles in both the relationship between gender equality and economic development (World Bank 2012) and in macroeconomic gains from increased female labor force participation (IMF 2013). The World Bank argued that gender equality promotes economic development by enhancing efficiency and therefore, referred to targeting gender equality as “smart economics” (World Bank 2012). In the Global Gender Gap Report, the World Economic Forum documented a positive correlation between gender equality, income per person, level of competitiveness, and human development indicators (World Economic Forum 2014). The IMF emphasized the potential macroeconomic gains to be realized from increasing the participation of women in the labor force, which it convincingly argued would increase economic growth and income per person over time (IMF 2013). Another paper published by the IMF in February of 2015 found that countries with fewer legal restrictions against women's right to work and own property have higher female labor force participation (IMF 2015).

Commitments to gender equality and women's equal access to and control over resources have been on the agendas of international organizations and many governments since the Fourth World Conference on Women in 1995, which led to the Beijing Platform for Action (BPA) and the Beijing Declaration, an important step in recognizing that eradicating poverty is closely linked to empowering women and enabling their equal access to productive resources and assets. The twenty-third special session of the General Assembly and the Millennium Summit in 2000 acknowledged that promotion of gender equality is an effective means of fighting poverty, hunger, and disease and of stimulating economic development in a sustainable manner, hence, placed it together as the third Millennium Development Goal (MDG). This goal was on the agenda of the 2005 World Summit, the International Conference on Financing for Development in 2002, and the Follow-up International Conference on Financing for Development to Review the Implementation of the Monterrey Consensus in 2008.¹

The seventieth UN General Assembly in 2015 put forth 17 new Sustainable Development Goals (SDGs), which cover a wider set of development areas as compared to the MDGs aimed to fight development problems in their roots. Committed by more than 190 countries, the new SDGs explicitly underline the importance of many areas such as gender equality, human rights, besides poverty and health that were the primary targets of the MDGs. In particular, the fifth goal aims at promoting gender equality and empowering all women and girls. Total investment to achieve all SDGs by 2030 was estimated between US$90 - 120 trillion.² Yet, it is not clear how these new commitments will be financed and what sorts of resource mobilization mechanisms will be utilized.

Human rights treaties have also focused on women's rights in terms of equal access to and control over resources and their empowerment in economic decision making. The Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) requires every state to implement measures to eliminate discrimination against women and ensure that gender equality is realized in economic, political, social, and other fields. In the context of economic rights, the

¹ For a critical review of the UN reform process, see Kettel (2007). For an overview of international conferences on women's rights, see United Nations (2014).

Convention requires states to ensure the provision of fair wages and equal remuneration for women. It also states that the same rights should apply to both spouses in the ownership and management of property.

Despite these international commitments and human rights initiatives, the resources allocated to the achievement of gender equality have been rather limited. Out of all development objectives agreed upon by the international community, gender equality is one of the most underfunded. Deeply entrenched inequality and discrimination against women remain the reality. Although women’s levels of education have been rising globally, this has not been accompanied by greater gender equality with regard to labor. In cases where female labor force participation has been rising, this has not decreased gender inequalities in terms of how time is spent. Unpaid care and work continue to be performed predominantly by women, and this disproportionate time burden prevents women from achieving their full potential in the overwhelming majority of countries around the world.

Feminist economists and others have engaged in research and advocacy on macroeconomic policies from a gender perspective for many years (Elson and Cagatay 2000; Cagatay et al. 1995; Grown et al. 2000; Cagatay 1998; Cagatay 2003, among many others). However, most of the proposed gender responsive budgeting initiatives are only aimed at national and local level (Cagatay et al. 2000). At the international level, some feminist economists have also proposed, over the years, international resource mobilization, in particular the Tobin tax, as a means of ameliorating volatility and raising funds for gender equality goals (Cagatay 1996, 2003; Floro et al. 2004). There is a growing literature on innovative financing and Global Public Goods (GPGs). However, scant attention has been paid to the difference these funds could make in women’s equal access to economic and financial resources and how gender equality could be promoted through the use of innovative financing.

This paper aims to fill this gap. We argue that at least one aspect of the elimination of gender inequalities should be considered as a GPG, hence, call for global sources of finance. This first step is important because most studies of innovative finance have failed to account for this, led to a gender-blind discussion of how these funds can be utilized. Then, we explore the potential of “new and innovative sources of finance”, which cover a broad range of resources that are alternatives to traditional aid flows, and that can be mobilized at the global level for financing development and other global public goods. Finally, we propose the creation of a “Global Fund for Women” as a mechanism for coordinating and sustaining long-term commitments to finance gender equality. This would be an intermediary and coordinating institution with the responsibility for channeling innovative financing to investments in closing gender gaps in economic and social life; it would also disseminate knowledge on gender equality as a GPG.

The paper is organized as follows. Section 2 focuses on the case for financing gender equality through innovative sources of finance and examines the cross-border positive externalities that arise from the elimination of gender inequalities. Section 3 focuses on the existing commitments of donors to finance gender equality by examining trends in gender-focused aid flows and their share in total aid.

---

3 See the report on “Innovative Mechanisms of Financing for Development” by the Department of Economic and Social Affairs, United Nations (2011a).
flows. Section 4 examines the scale of financing needs for gender equality. Section 5 examines the objectives of the Global Fund for Women and how it can be funded through innovative sources of finance. Section 6 briefly reviews priority areas for the allocation of gender equality funds. Section 7 concludes and identifies policy implications.

2. The Case for Financing Gender Equality through Innovative Sources of Finance

The case for financing gender equality goals in international commitments through the use of innovative sources of finance can be made on two main grounds. First, gender equality is a basic human right. This recognition has led to several international agreements wherein governments pledged to allocate sufficient funding for its realization. However, despite the fact that gender equality goals are internationally recognized and agreed upon, the resources required to realize these goals have not been put into place. This calls for the mobilization of new resources at the global level in order to take action on behalf of gender equality interventions. Second, innovative sources of global finance are needed for eliminating gender inequalities because there are strong positive cross-border externalities realized from a reduction in gender inequalities.

Global public goods (GPGs) are defined as goods, policies, and institutions that are systematically underprovided by private markets because of strong incentives for free-riding (Kaul et al. 1999). Such inadequate provision generates international externality effects, which harm third parties when the public good is not provided. A common example is that the failure to reduce pollution in some countries has negative effects on the health of other countries’ residents. Since national policy makers often ignore the well-being of foreign citizens as they formulate their own domestic public policy programs, policy coordination among nation states is required for the efficient and equitable provision of GPGs. This is the key reason for the provisioning of GPGs through international coordination and international sources of finance.

The question of gender equality as a public good has been posed by Blackden (2009), who argues that gender equality should be seen only as a national public good because it does not have cross-border (or trans-boundary) externality effects. There are problems associated with viewing gender equality as a public good whether at the national or global level. First, gender inequalities are multidimensional and it is difficult to treat them as phenomena that can be added. Second, treating gender inequality as a public "bad" begs the question of the "optimal" level of gender inequality. The answer to such a question is obviously "zero". Because gender inequalities constitute violations of women's rights, there cannot be a discussion of their "optimal" level. However, one phenomenon related to the promotion of gender equality can be seen as a global public good is in the production of knowledge about the elimination of gender inequalities. Gender equality as a form of knowledge shows all of the pure global public good features of any knowledge good: it has zero additional costs when enjoyed by others; it is very difficult to exclude others from enjoying it; and it creates positive externalities that spill across borders. We focus on three of these international externality effects: those resulting from the failure to protect the reproductive rights of women, women's involvement in natural resource management, and women's engagement in peaceful solutions to violent conflicts.

---

4 Knowledge of eliminating gender inequalities has to take into account the different constraints facing women in different countries in order to produce policies that are effective in different contexts.
First, the failure to protect the reproductive rights of women in some countries results in high fertility rates that increase population pressures worldwide. It is very well-documented that population growth puts pressure on world resources and results in higher greenhouse gas emissions. Based on a group of 34 developing and industrial countries (comprising two thirds of the world’s population), O’Neill et al. (2010) estimated that reducing population growth by half would reduce carbon emissions by 16-29% by 2050 and 37-41% by 2100, helping to prevent hazardous climate change. Wire (2009) found that proper family planning could prevent 53 million unintended pregnancies annually, which would cut carbon emissions by 17% by 2050. These environmental spillover effects are obviously remarkable; they can be easily achieved through instituting family planning, contraception education and securing the reproductive health and related rights of women. As reviewed in the Human Development Report 2011, there is widespread failure in ensuring access to reproductive healthcare, and MDG 5 -- improving maternal health, including the adolescent birth rate, antenatal care, and family planning -- is far from being achieved. Investment in protecting reproductive rights would not only reduce carbon emissions but also improve standards of living to produce a healthier and more productive labor force.

Second, as women play important productive roles in agriculture, they are especially vulnerable to the negative effects of climate change, including recurring droughts and erratic rainfall. This situation worsens inequalities in women’s access to and control over resources such as land, productive inputs, credit, and so on. However, women also carry important responsibilities in natural resource management, within the household as well as at the community level, and their knowledge and different interests in sustainable resource use allow them to develop better adaptation strategies in the face of climate change (e.g., see Agarwal 2009a, 2009b). An enhanced role for women in natural resource management through the promotion of equal access and control over resources can thus provide an effective tool for sustaining and developing better climate adaptation strategies with clear positive cross-border effects. For example, an increase in the number of women involved in the management of forests leads to an increase in the sustainable use of forests' resources. The preservation of these forests contributes to a reduction in carbon levels in the atmosphere, and therefore indirectly benefits residents of other countries.5

Third, women have organized for the goal of disarmament and remained active in peace-building processes. During World War I, approximately 1,200 women from warring and neutral countries strongly opposed the conflict and founded the Women's International League for Peace and Freedom (WILPF), an organization that has since advocated for disarmament internationally. Since then, women have continued to support disarmament and reductions in military expenditures and arms exports. In 2011, Liberian president Ellen Johnson Sirleaf, Liberian peace activist Leymah Gbowee, and Yemeni journalist Tawakkul Karman were jointly awarded the Nobel Peace Prize "for their non-violent struggle for the safety of women and for women's rights to full participation in peace-building

---

5 The improvement of women's participation in natural resource management should not be seen as an objective that is in conflict with shifting women's employment from agricultural to non-agricultural sectors. It is clear that some women benefit more from being employed in more productive, non-agricultural sectors, and their participation in these sectors has to be supported through macroeconomic policies. However, for the remaining population in agricultural sectors, it is important that women play an active role in the governance of natural resource utilization in order to preserve long-term resource sustainability for the reasons explained above.
work” (Nobel Foundation 2011). In 2000, the Nobel Committee stressed the importance of the UN Security Council’s resolution, which emphasized the need to overcome violence against women in armed conflicts and the importance of women’s equal representation in peace processes. This recognition of women’s great potential for peacemaking underscores the importance of women’s political representation in national parliaments and in peace activism in general. Greater gender equality would thus have another cross-border positive spillover effect: creating more peaceful solutions to social conflicts and preventing the spread of conflicts to other countries.

A large body of evidence shows that women’s participation in peace negotiations has resulted in sustainable resolutions that also incorporated gender equality in resource redistribution during the post-conflict period (UNEP, UN Women, PBSO and UNDP 2013). For example, during peace negotiations in Darfur in 2006, women underscored the harmful effects of war on agricultural resources and demanded that policy measures be taken to enhance agricultural production, including new investments in productive inputs and provision of credit. The resulting Darfur Peace Agreement incorporated these demands as part of the Darfur Reconstruction and Development Fund (2006), UN Women (2012) includes several other cases of women's organizations being involved in the peace-building process and notes the need for greater involvement of women as active negotiators in formal peace resolutions.

3. Existing Commitments of Donors to Finance Gender Equality: Trends and Prospects

Traditional aid flows in the form of Official Development Assistance (ODA) and individual country commitments have been important in financing gender equality interventions. In the early 1970s, donors primarily funded development projects that aimed to reduce gender gaps in access to education and health services. Beginning in the early 1990s and particularly after the Beijing Declaration in 1995, donors began to implement a twin-track approach, which involved direct investments targeting women and girls and promoting gender mainstreaming in all development programs funded by donors. In order to keep track of gender-related financing, the OECD-DAC began to screen the aid commitments of donors to determine whether promoting gender equality is a principle objective of the program, or whether it is a significant component of the program even though it does not directly target women, such as large sectoral programs in rural development, water and sanitation, broad health and education reforms.

Figure 1 shows the evolution of donor countries' commitments to funding gender equality interventions according to this twin-track approach, as well as other development goals, from 2002 to 2013. If the projects directly target women and girls through subsidies for girls' education, investing in maternal health facilities, etc., these funds are designated as having a "principal” objective in promoting gender equality. If the projects indirectly promote women's empowerment through gender mainstreaming, these funds are designated as having a "significant” objective of closing gender gaps. In cases where the projects do not have any gender-focused component, these were designated as "screened, not targeted”. Lastly, there remain projects that are "not screened" yet, and therefore we have no information about whether or not they promote women's empowerment.

Several interesting patterns emerge from Figure 1. First, although funding for projects with a principal objective of gender equality has improved in absolute terms over the years, it remains very low compared to total aid commitments (only US$5 billion out of US$140 billion in 2013). Second,
even those projects with a significant objective of gender equality receive less than half of the funding that accrues to projects without any gender equality component. Although financing of projects with significant gender equality objectives increased from roughly US$10 billion in 2002 to US$30 billion in 2013, they received nowhere near the funding that is allocated to other projects, which increased from US$30 billion in 2002 to US$84 billion in 2013. Finally, although the non-screened portion of aid flows has declined significantly over this period, US$21 billion of funding have not yet been screened.

Figure 2 shows that the share of gender-focused aid as a share of total aid seems to have increased from 14% in 2002 to 25% in 2013. However, this is largely due to the increase in the screened share of aid in total. Hence, we observe no major increase in the share of funding allocated to the elimination of gender inequalities across multiple domains.

Figures 3, 4, and 5 illustrate the allocation of donor funding to gender equality in sectors that receive the largest aid flows: education, health, and governance. Panel (a) of Figure 3 shows that the absolute amount of funding allocated to gender-focused aid in education fell sharply in 2007 but began to increase post-crisis in 2008, fluctuating around US$4-5 billion. Panel (b) of Figure 3 indicates that basic education received the largest allocation of gender-focused aid as a share of total screened aid. From 2007 to 2009, there has been a large increase in the share of funds allocated to secondary and post-secondary education. This was accompanied by a recognition that the gender gap in primary education has been largely eliminated in most parts of the world while important gaps remain in secondary and post-secondary education for boys and girls in several countries.

Figure 4 shows an increase in the absolute levels of gender-focused aid in health services after 2008. However, most of this increase is attributable to the increase in basic health aid (including primary health care services, investments in health-related infrastructure, health-related education programs), while general health aid targeting gender equality (such as family planning, reproductive health care services, maternal health care) has remained stagnant. As a result, the share of gender equality targeted general health aid in total screened health aid, has declined from approximately 55% in 2002 to 40% in 2013. Overall, there is a need to increase funding for general health care services in reproductive and maternal health.

Figure 5 shows that the absolute amount of gender-focused aid allocated to civil society institutions and conflict resolution has been increasing rapidly over time, reaching more than US$6 billion in 2013 as seen in Panel (a). However, Panel (b) indicates that as a share of total screened governance aid, both types experienced stagnation growth after 2010. The gender-focused aid allocated to civil society increased from approximately 35% in 2002 to 50% in 2010 but fell to 40% in 2013. In contrast, the share of gender-focused funds allocated to conflict, peace and society has shown a more rapid increase from slightly less than 10% in 2002 to 40% in 2009 and has fluctuated approximately 30-40% from 2010 to 2013. Most conflict resolution aid focused on gender interventions is allocated to fragile states. While there has been a rapid increase in the absolute levels of such funding, the recent stagnation after 2010, as a share of total governance aid, is concerning.

Finally, Figure 6 illustrates the sectoral composition of aid flows that are allocated to gender-equality interventions. In addition to the largest three sectors of education, health, and governance, the agricultural sector is the next largest recipient of gender-focused aid in absolute terms (US$2.8 billion
in 2013). This includes subsidies to women farmers to ease the constraints on their access to credit and training programs. Other sectors that receive gender-focused funding include transport and storage, communications, energy, banking and financial services, business and other services, industry, mining and construction, mineral resources and mining, trade policies and regulation, and tourism. Figure 6 shows that these sectors are allocated a relatively small share of gender-focused aid, and this pattern has not changed much from 2002 to 2013.

One of the major concerns with ODA is that it has tended to decline since the end of the Cold War in 1989, which reflects the weak political will of donor countries to meet the official assistance target of 0.7% of their GNI. There is substantial variation between and within countries in their speed and degree of change towards the achievement of development goals; and the goal of reducing maternal mortality and achieving gender equality still faces the greatest difficulties in all countries. The need for increased gender-focused financing is clear. However, there are considerable political obstacles to scaling up new aid funds or to countries’ receiving previously committed funds. Furthermore, traditional aid flows suffer from being unpredictable, inadequate in size, and highly politically determined with an inherent short-term bias (Grown 2014).

To overcome these shortcomings, new and alternative sources of financing have been explored extensively in the recent development agenda. In the context of the World Summit for Social Development, the UN General Assembly requested a rigorous analysis of proposals for developing innovative sources of financing. The Monterrey Consensus, agreed upon at the 2002 Conference on Financing for Development, placed this issue on the agenda of global financial cooperation. Since then, this call for innovative development of financing has been reiterated several times, most recently in the 2008 Doha follow-up to the Monterrey Conference and later at the 2010 General Assembly. Under the leadership of France, the Leading Group on Innovative Financing for Development started to adopt some specific initiatives in this area in 2006. These initiatives have made important contributions to financing global health initiatives. Nevertheless, it remains unclear how innovative financing could be mobilized to finance gender-equality goals that require long-term financing commitments.

4. The Scale of Financing Needs for Gender Equality

A fundamental question in the debate on international development finance is the measurement of the scale of financing required to attain various development indicators in developing countries. Since the Millennium Declaration there have been empirical projections of the costs of attaining gender equality in education (MDG-2 and MDG-3) and health (MDG-4 and MDG-5) in comparison to the costs of attaining all MDGs. Here, we compile all existing estimates and express them in 2014 dollars for easy comparison. Despite differences in methodological approaches and underlying assumptions, Table 1 shows that the estimates in 2014 US dollars are in the range of US$9 - US$39 billion for educational development goals and US$26 - US$62 billion for health-related development goals. The sum of these estimates suggests a range of US$35 - US$101 billion in constant 2014 USD (approximately 25-50% of the total cost of MDGs). Grown et al. (2006) provides the most comprehensive gender-equality interventions estimates, including MDGs 2-3-4-5 and gender

---

6 See Sen and Mukherjee (2014) and Fukuda-Parr (2012) for a critique of MDGs from a feminist perspective that emphasizes the interdependence of human rights in achieving gender equality goals.
mainstreaming. Figure 7 plots their projections under three scenarios in constant 2014 USD billions: (i) all gender equality interventions are externally financed and the government does not make a contribution (all externally financed), (ii) the government spends 1% of public expenditure, scaling up to 3% by 2015 (small government contribution), and (iii) the share of government resources spent on gender equality interventions is proportionate to the share of gender equality intervention costs in total MDG costs (large government contribution), which is the assumption made by the UN Millennium Project. They provide a similar bound of estimates ranging between US$31 - US$107 billion in constant 2014 US dollars, with the higher estimate of US$107 billion being conditional on governments not providing resources proportionate to external borrowing, as in the first scenario, which is stronger supported by empirical evidence (Elson 2006).

The Report of the High Level Panel on Financing for Development, also referred to as the "Zedillo Report" after the former President of Mexico who chaired the Panel, projected that an additional US$12 billion per year was needed to achieve MDG-3, including providing universal primary education at a cost of US$9 billion and achieving gender equality in education at a cost of US$3 billion (United Nations 2001). The Report also estimated that this was 24% of the total cost of achieving the MDGs (US$50 billion annually). However, it did not provide a separate estimate for MDG-4 or MDG-5. The Report's estimate of the cost of universal primary education relied on the projections of Delamonica et al. (2001) from UNICEF, which suggested that an additional US$9.1 billion were needed to support a global “education for all” program.

These first-round estimates were followed by the World Bank's study (by Devarajan et al. (2002)), which provided two separate ranges of estimations that roughly corresponded to UN figures. The first suggested that the MDG-1 goal of reducing poverty by half would require US$54 - US$62 billion. A key assumption in this estimation was that the stimulus to higher growth would not only reduce poverty but also increase the demand and supply of health, education and environmental services, thereby achieving other MDGs as a result. The second estimation, however, relied on calculating the costs of achieving health, education, and environmental goals separately. This provided a wider range of US$35 - US$72 billion. The underlying assumption in this estimation was that achieving these MDGs separately will result in higher incomes, ensuring the attainment of MDG-1 as a consequence. Devarajan et al. (2002) argued that this "joint production" of goals would have spillover effects on each other. For this reason, the estimates should not be summed up to prevent double counting.

In a background paper for the UNDP Human Development Report (HDR) 2003, Pettifor and Greenhill (2002) followed the methodology of the Zedillo Report by focusing on the same sectors separately but specifically highlighted the importance of debt relief if several low-income economies are to achieve the MDGs. The total cost of financing MDGs was estimated to be US$76 billion, which corresponded to the World Bank's upper bound estimates and was substantially larger than the Zedillo Report. The estimates for MDG-2 and MDG-5 were slightly lower than those of the World Bank: US$6.5 billion and US$20 billion, respectively, which lie below the World Bank's estimates of US$10-30 billion and US$20-30 billion.

---

7 Another related World Bank study estimated the costs of MDG-2 and MDG-3 as US$8.4 billion (World Bank 2002).
The World Health Organization (2001) provided the first comprehensive study focusing on the costs of health-related MDGs by analyzing more than 80 countries and identifying 49 interventions as essential to a well-functioning health-care system. The cost of these interventions was estimated in the range of US$27 - US$38 billion. However, these estimates relied on an optimistic growth scenario for countries included in the study as well as strong resource mobilization in the health sector. This might have resulted in a downward bias of the estimates.

One of the problems with the global sector models included in the Zedillo Report, the World Bank’s study by Devarajan et al. (2002), and the HDR background paper by Pettifor and Greenhill (2002), is that the models for each specific sector, e.g., health or education, were not well-specified and the complementarities among sectors were largely ignored (Heuty and Reddy 2003, 2008a, b). For example, the models for the education sector ignored or underestimated the effects of HIV on lowering education outcomes, including higher rates of morbidity among teachers and higher rates of orphans among students. This resulted in underestimates of the true costs of universal primary education, MDG-2. Since most of these models estimated the costs of the MDGs by summing across all sectors, they ignored the complementarities and spillover effects of interventions in one sector on other sectors. While the studies recognized that interventions for improving water supplies and sanitation would improve health outcomes and reduce school drop-out rates, these complementarities among the environmental, health and education sectors were largely neglected, resulting in double-counting.

The following studies relied on country-level analyses with the goal of providing better models for each sector in the economy. These models were combined by using a detailed social accounting matrix for each country. These studies also incorporated better unit cost measures for specific interventions given the country context. Among these, the UNDP implemented a number of costing exercises at the country level in Cameroon, Malawi, Uganda and the United Republic of Tanzania in Africa and the Philippines in Asia (United Nations 2002a). Although the weakness of underlying country data made it difficult to accurately determine the unit costs of interventions, especially when the estimates covered only six sectors, this study paved the way for a much more comprehensive UN study—the Millennium Project.

The UN Millennium Project Report, chaired by Jeffrey Sachs, expanded the coverage of countries to include several additional low-income countries. It provided a much more careful and detailed analysis of the unit costs involved in achieving the MDGs and developed a comprehensive sectoral framework that also included infrastructure and energy sectors (United Nations 2005). It also made an effort to take into account complementarities among sectors to prevent double-counting. It proposed that the additional annual costs of MDGs lie in the range of US$70 to US$130 billion.8

In a joint report of the Guttmacher Institute and the United Nations Population Fund (UNFPA), Singh et al. (2009) estimated that the additional costs of investing in modern family planning and

---

8 These estimates should still be interpreted with caution since the study suffers from the common problem that uncertainty shocks (especially from the external sector, such as commodity price shocks and foreign monetary policy shocks) are not taken into account and therefore the list of interventions cannot replace a well-designed development strategy with coherent macroeconomic and institutional policies.
meeting unmet needs for maternal and newborn health services would be US$12.8 billion per year. US$3.6 billion of this amount would be used to provide modern family planning, while US$9.2 billion would cover the cost of the maternal and newborn care required for all pregnant women and their newborns who do not currently have access to such services.

According to the OECD’s research (Atisophon et al. 2011); (OECD 2012), it would cost US$8.8 billion annually to achieve MDG-2 and US$58.9 billion annually to achieve MDG-4 and MDG-5. These studies follow the global modeling approach used by Devarajan et al. (2002). Their total estimate for MDGs 1 through 6 is US$125 billion in constant 2014 US dollars, which falls within the range of estimates provided by the UN Millennium Project (US$85-158 billion in constant 2014 US dollars).

To summarize, despite substantial methodological differences, the estimates for funding education- and health-related development goals line up closely. In constant 2014 US dollars, the cost of educational development goals ranges between US$9 - US$39 billion, while the cost of health-related development goals ranges between US$26 - US$62 billion. The sum of these estimates suggests that a range of US$31 - US$107 billion in constant 2014 USD is needed to meet the educational and health related development goals. In Section 3, we have documented that the most recently available data in 2013 on the commitments of donors to gender-equality interventions shows an allocation of US$30 billion in constant 2014 USD when both principal and significant components are taken into account. Therefore, current financing for gender equality meets only the lower bound of what is required for effective global resource mobilization. Given that the governments of many low-income countries do not provide funding that is proportional to the share of gender-equality spending on total MDGs it is more realistic to consider the scale of new financing that the Global Fund for Women would need to mobilize through innovative sources fall in the upper bound range (approximately US$470 billion per year). Some appropriate global financing schemes can be utilized in order to raise the remaining funding needed for financing gender equality.

5. Innovative Financing of the Global Fund for Women

The Global Fund for Women would have the following objectives: (i) forming a coordination mechanism in which each country receives financial support proportional to its needs in closing gender gaps and achieving true, sustainable gender equality; (ii) ensuring that a portion of these innovative sources of financing is channeled to the Global Fund for Women and is directed toward financing gender equality goals; and (iii) allocating loans and grants for gender equality interventions commensurate with country needs by prioritizing lower income countries with greater financial needs.⁹

The Global Fund for Women that we propose in this paper differs from previous proposals in two respects. First, its source of funding would be delinked from typical donor country politics, with the benefit of creating a more predictable and sustainable source of finance that is also substantial in scale. Previous proposals have focused on creating a special fund financed by donors’ aid flows (Grown et al., 2006). Second, it would have a global character, recognizing that gender equality is not

---

⁹ Priority areas for the use of these funds are explained in the supplement material available online.
just a national level goal but an internationally recognized global goal that requires global financing for its achievement.

Recent experience with innovative financing has shown with clarity that the scale of potential additional financing is small, except in three particular cases: (i) an international financial transaction tax, (ii) allocation of Special Drawing Rights (SDRs) for global public goods, and (iii) carbon taxes or carbon emission trading. These sources of innovative financing have the potential to generate the financing needed to achieve gender equality and women's empowerment.

5.1 An international currency transactions tax

Proposals for implementing a cross-border currency transactions tax have been renewed since the global financial crisis of 2007-09, when government budgets came under increasing pressure. The idea of taxing financial transactions to improve financial stability has a long history, building on the early insights of John Maynard Keynes. In order to reduce the volatility induced by excessive speculation in stock markets, Keynes proposed a small tax on financial transactions, in particular on stock market transactions. This was followed in 1972 by James Tobin, who suggested a 1% tax on currency transactions. In 1996, he revised his proposal, arguing that a 0.1% tax would be sufficient for achieving two objectives: (i) having exchange rates largely reflect fundamental long-term factors and not merely short-term risks, and (ii) rendering national macroeconomic policies more independent. Given the revenue-raising potential of the tax, he proposed that the generated revenues be used for international purposes.

The proposals for the "Tobin tax", as it came to be widely known, have been supported by a diverse set of economists, including feminist economists. Cagatay (1996) proposed that such taxation be used in the context of international trade. Cagatay et al. (2000), Elson and Cagatay (2000) and Cagatay (2003) argued that financial instability had increased in the aftermath of financial liberalization; more frequent economic crises tended to have disproportionately detrimental effects for women, and that initiatives, such as the Tobin tax, would directly benefit women by reducing financial volatility. They also showed that governments had been under increasing revenue constraints due to trade liberalization and tax incentives for foreign direct investment. Hence, one way to compensate for this loss in revenue would be to tax cross-border financial flows with a Tobin tax.

In the finance literature, a large body of theoretical works has focused on the different types of traders in financial markets. These include "irrational noise traders", whose erroneous beliefs about asset prices results in speculative trading that distorts asset prices; and "rational traders", who trade assets based on fundamentals but may be deterred from entering the market due to the high risks created by the unpredictability of noise traders' beliefs (De Long 1990); (Dow and Gorton 2006). To the extent that a small tax on financial transactions would make it costly for the noise traders to take speculative positions, it would reduce the volatility of asset prices without causing a major distortion in the market.

---

10 In terms of resources, the major contribution over the past decade has been made by the Clean Development Mechanism (US$28 billion), while the next two largest sources have yielded much less in terms of additional resources - the IFFI (International Finance Facility for Immunization) has yielded US$3.4 billion and the solidarity levy on airline tickets slightly over US$1 billion (United Nations 2011b).
These theoretical works were accompanied by a set of empirical studies focused on the proposal of a currency transactions tax (Landau 2004; Nissanke 2005; Spratt 2006; Schmidt 2008). These studies approached the issue from the perspective of raising new resources by imposing a small tax - as low as 0.005% - on cross-border currency transactions. In this sense, they differ from the original proposal of Tobin, which aimed to change the composition of traders in financial markets by using a relatively higher tax rate as a disincentive to speculative trading. The much lower tax rates proposed in the recent empirical literature on currency transactions taxes aims precisely not to distort the currency market while still raising substantial amounts of revenue for international purposes.

These international transaction taxes were motivated by a long history of applying financial transactions taxes at the national level. For example, the United Kingdom applies a stamp duty of 0.5% on share sales. Many advanced countries, including the United States, have stamp duties on mortgages and some other financial transactions. In the developing world, several countries have imposed taxes on domestic financial transactions and on external ones during certain episodes. Brazil uses a tax on international capital flows counter-cyclically - the tax is raised during capital inflow surges and reduced during capital outflow periods. The unremunerated reserve requirements used by several countries, including Chile, Colombia, and Thailand, serve a similar purpose of regulating capital flows, while generating massive revenues for governments.

Recent proposals for the currency transactions tax propose that the tax applies not only to the transactions in spot markets but also those in derivative markets. Combining both of these foreign exchange markets yields a high volume of transactions of around US$3 billion per day. There are various estimates of the revenues to be gained from imposing a tax on these flows. Schmidt (2008) estimates that a tax of 0.005% would generate roughly US$30 billion annually. An international group of experts, the Taskforce on International Financial Transactions for Development (2010), estimates a revenue of $33.5 billion for the same tax rate. Ocampo et al. (2007) use a broader range of taxes to reach a broader estimate of US$20-60 billion.

Technological innovations in the international settlement system make it easier to collect taxes on cross-border currency transactions at a low cost. In particular, the Real Time Gross Settlements System (RTGS) allows these transactions to be made in a centralized fashion at low cost and in real time. These innovations could allow the international currency transaction tax to be implemented multilaterally, or at least covering the major currency transactions. However, Spratt (2006) and Griffith-Jones and Persaud (2012) showed that the tax could be initiated by covering key individual currencies at the earlier stages and then expanded to apply to a broader range of transactions including domestic markets and derivatives trading. The resulting revenues would be allocated by the international community for the financing of internationally agreed upon developmental goals including the financing of a Global Fund for Women for the achievement of gender equality goals.

5.2 The Use of Special Drawing Rights (SDRs) for global public goods

The SDRs are international reserve assets issued by the IMF in order to supplement IMF members' official reserves. Proposals for mobilizing SDRs allocated to industrial countries (most of

---

11 The particular governance structure of such a global fund is beyond the scope of the current paper. However, it would require representatives from all countries and would function in collaboration with existing international organizations.
which remain unused in their central bank accounts) for the provision of global public goods were made by Soros (2002) and later reiterated by Stiglitz (2006). At the 2009 Copenhagen Climate Change Conference, Soros also suggested using SDRs to create a "fast-start green fund". This idea was supported in January 2010 by the IMF’s then-Managing Director, Dominique Strauss-Kahn and has been endorsed by civil society organizations (Using SDRs for Climate Finance 2010). In fact, the idea of using some SDRs for international aid has a long history, going back to the discussions of the 1960s and early 1970s (Erten and Ocampo 2014).  

One channel through which this can be done is the establishment of trust funds with SDRs, such as "Green Fund", or, a "Global Fund for Women". The idea is that advanced countries would deposit their unused SDRs into the trust funds as "equity", which could be used to make loans to developing countries for financing climate change and women's empowerment programs. Since the return on these loans can be used to service interest payments on borrowing SDRs from the IMF, the donating countries would not bear the costs of making interest payments to the IMF. This makes it politically feasible to implement this proposal. Clearly, it makes sense for these funds to prioritize their lending to developing countries, with the possibility of concessional lending to low-income countries.

The proposed magnitudes of new SDR allocations vary depending on certain criteria. The IMF’s reports often use three conventional criteria: reserve coverage of imports, coverage of short-term debt, and coverage of broad money (IMF 2011b). The latter two criteria imply a substantial increase in the projected demand for reserve assets. While the 5-year estimates for 2009 ranged between US$700 - 900 billion (IMF 2009), estimates for the same period have increased to the range of US$800-1,600 billion starting in 2011 (IMF 2011b). The IMF proposes new SDR allocations of US$117-133 billion a year for three years to provide a stable supply of global reserve assets.

Table 2 presents a list of studies that proposed a new allocation of SDRs, their estimation methods, and the estimated magnitudes of issuance. On average, most studies propose a consistent amount of regular allocations ranging from an average of US$200 billion to US$300 billion annually. In general, studies rely on an indicator of global demand for additional reserves with a precautionary motive to estimate the required supply of reserves. An advantage of these regular allocations will be a substantial diversification of reserves. According to the IMF’s report (2011a), an annual allocation of US$200 billion would raise the share of SDRs in total reserves to approximately 13% by the 2020s. The Stiglitz Commission made the case for regular allocations in the range of US$150-300 billion a year (United Nations 2009c, ch. 5). Another recommendation by a group of experts, including Stiglitz, is even larger - US$240-400 billion (Stiglitz et al. 2011).

The resources available for the provision of global public goods would be proportional to the unused SDRs allocated to high-income countries. If the IMF decides on annual allocations of US$240-400 billion, the funds allocated to high-income countries would be roughly US$144-240

\footnote{12 Detailed explanation on reasons for using this mechanism of international economic cooperation is available on the online supplement.}
billion and, at a conservative estimate, US$100-200 billion would be unused funds.\textsuperscript{13} If advanced countries place their unused SDRs into the trust funds, such as the Global Fund for Women, or a Green Fund, as "equity", the range of US$100-200 billion would provide a substantial resource base for the trust funds.

5.3 Carbon taxes and carbon emissions trading

Another innovative source of financing that is often recommended on the grounds of environmental efficiency is to tax carbon emissions. This was endorsed at the United Nations Framework Convention on Climate Change (as an outcome of the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change) on May 9, 1992, as the participating countries were invited to reduce greenhouse gas emissions. Carbon emissions could be reduced through a tax that would not only account for its negative externalities but also provide a sizable source of development financing. A carbon tax of US$0.05 per gallon of gasoline is estimated to generate US$130 billion revenue per year and US$61 billion per year if the tax is restricted to rich countries. If the tax rate were raised to US$0.35 per gallon of gasoline and applied to all countries, the revenues would reach US$750 billion per year (Schmidt 2008).

Revenues from the tax would become a significant source of development financing when governments collect and dispense it to an international agency based on an agreed-upon procedure. However, some countries may prefer not to apply the tax and thus "free-ride" on those who do (Ocampo et al. 2007). Even if governments agree to apply the tax, it may be evaded by several firms in the absence of a strong tax collection system. There are also redistributive effects of the tax, and compensations have to be made through an international agreement.

The 2009 UNFCCC Conference held in Copenhagen established a commitment to mobilize US$100 billion per year by 2020 for a global climate change fund to meet the needs of developing countries. The Report of the Secretary-General's High-Level Advisory Group on Climate Change Financing (2010) provided an outline of how the target of US$100 billion could be reached: (i) $30 billion from transferring 10% of carbon taxes raised in developed countries to developing countries, based on a carbon tax of $20-25 per ton by 2020, (ii) $10 billion from carbon taxes on international transportation, including aviation and shipping, (iii) $10 billion from reallocation of fossil fuel subsidies, (iv) $10 billion in additional capital for multilateral development banks, which could raise $40 billion in gross financing and $11 billion in grants, and (v) direct budget contributions (United Nations 2010). Overall, the implementation of such a carbon tax would create $100-150 billion annually, resulting in roughly $10-15 billion in net transfers to developing countries.

6. Conclusion

This paper argues that it is possible to provide adequate financing for achieving gender equality and women's empowerment by recognizing their cross-border positive externality effects and by launching a Global Fund for Women for the benefit of the entire world. Under the recommended arrangement, a portion of the innovative financing would be raised for the Global Fund for Women.

\textsuperscript{13} Since high-income countries hold 60% of the quotas at the IMF and the new SDR allocations are distributed based on country quotas, high-income countries as a whole would receive 60% of the new SDR allocations. It is also known that roughly 70-80% of these reserves remain unused in central bank balance sheets.
This institution can, in turn, lend to countries commensurate with their needs. It would finance gender equality investments in priority areas by frontloading of the funds to increase the probability of successful outcomes in later stages.

Such an arrangement would go a long way toward rectifying the historic underfunding of investments in gender equality and recognizing that any serious effort to generate gender equal outcomes requires that substantial resources be raised, managed, and allocated. Given that women's increased participation in political bodies in general, and in natural resource management in particular, provides increased provision of other public goods (including water, sanitation, irrigation, health, and education), as well as better conservation and regeneration of natural resources, this institutional arrangement would benefit not only women but also children, men, and elderly across the world.

A major policy implication of this paper is that, if gender equality is to be one of the adequately funded development objectives of international cooperation, the participating countries have to demonstrate a significant political effort to create the Global Fund for Women. The potential gains, however, are substantial. First, this Fund could provide a coordination framework capable of mobilizing large resources and meeting the financing requirements of attaining and sustaining gender equality for generations to come. This is far preferable to the alternative of asking for pledges from donors and having high-level meetings every few years without decisive outcomes. Second, and linked to the previous point, once created, the Global Fund for Women's source of funding will be disassociated from typical donor country politics, creating a more predictable, sustainable, and larger scale source of financing. Third, the establishment of the Global Fund for Women could help move the international community to a coordinated global consensus on eliminating gender inequalities on economic, political, and social levels. This would allow the implementation of previously agreed upon objectives in a successful and rapid fashion. Finally, the institution could enable developing countries that face relatively larger financing gaps to begin investing in achieving gender equality and women's empowerment much sooner than might otherwise be feasible, with positive spillover effects to the rest of the world as a whole.

Although most countries are interested in collaborating on international taxation to finance development and reduce tax-avoidance schemes, the Third International Conference on Financing for Development, held in Addis Ababa, failed to produce a successful result. The developing countries, organized around the Group of 77 and China, demanded an equal voice in the determination of global tax rules. They called for an intergovernmental body with the mandate and resources for the creation of a global framework for international tax cooperation. However, the developed countries, particularly the United States and the United Kingdom, were successful in preventing this change in global governance. This disappointing outcome in Addis Ababa, however, should not be seen as an end to the call for reform in the international financing of development. Instead, it is likely to generate further action through the leadership of major emerging economies as a wide range of unilateral tax measures are initiated, new forms of cooperation are launched, and governance of international organizations begins to change given the growing influence of emerging economies. Overall, considering the historical obstacles to development cooperation in the past decades, one major lesson is that new forms of global cooperation require political will and that changes in global governance often take place through changing political motivations among the world's leading countries. The global cooperation for financing gender equality is no exception in this regard.
References:


Heuty, Antoine and Sanjay Reddy (2003), "Achieving the Millennium Development Goals: A Review and a Strategy".


Ocampo, José Antonio (2011), Reforming the International Monetary System, 14th WIDER Lecture, Helsinki: WIDER.


OECD (2012), Can we still Achieve the Millennium Development Goals?: From Costs to Policies, Development Centre Studies, OECD Publishing


Rodenberg, B., (2009), Climate Change Adaptation from a Gender Perspective. German Development Institute.


_____ (2002), Human Development Network “Achieving Education for All by 2015: Simulation Results for 47 Low-Income Countries”.


FIGURE 1: TOTAL DONOR COMMITMENT TO GENDER EQUALITY
AND OTHER AID

Note: Data are from the OECD-DAC (2015). The graph shows the commitments of donor countries to financing gender equality interventions by targeting women and girls directly (principle objective) and by having a significant objective within a broader program (significant objective), other development projects (screened, not targeted), and non-screened projects (not screened).
FIGURE 2: SHARE OF GENDER FOCUSED AID TO SCREENED AID AND TOTAL AID

Note: Data are from the OECD-DAC (2015). The graph shows the gender-focused aid (projects with principle and significant objective of gender-equality) as a share of total screened aid and as a share of total aid (screened and not screened).
FIGURE 3: THE AMOUNT OF GENDER-FOCUSED EDUCATION AID AND ITS SHARE IN TOTAL EDUCATION AID

(a) The Amount of Gender-focused Aid by Education Level

(b) The Share of Gender-focused Aid in Total Screened Education Aid (in percent)

Note: Data are from the OECD-DAC (2015). Panel (a) shows the amount of gender-focused aid allocated in education aid in constant 2014 USD billions. Panel (b) shows the gender-focused education aid as a share of total screened education aid.
FIGURE 4: THE AMOUNT OF GENDER-FOCUSED HEALTH AID AND ITS SHARE IN TOTAL HEALTH AID

(a) The Amount of Gender-focused Aid by Type of Health Aid

(b) The Share of Gender-focused Aid in Total Screened Health Aid (as percent)

Note: Data are from the OECD-DAC (2015). Panel (a) shows the amount of gender-focused aid allocated in health aid in constant 2014 USD billions. Panel (b) shows the gender-focused health aid as a share of total screened health aid.
FIGURE 5: THE AMOUNT OF GENDER-FOCUSED GOVERNANCE AID AND ITS SHARE IN TOTAL GOVERNANCE AID

(a) Amount of Gender-focused Aid by Type of Governance Aid

(b) The Share of Gender-focused Aid in Total Screened Governance Aid (in percent)

Note: Data are from the OECD-DAC (2015). Panel (a) shows the amount of gender-focused aid allocated in governance aid in constant 2014 USD billions. Panel (b) shows the gender-focused governance aid as a share of total screened governance aid.
FIGURE 6: THE SECTORAL COMPOSITION OF GENDER-FOCUSED AID

Note: Data are from the OECD-DAC (2015). The graph shows the amount of gender-focused aid allocated in each sector in constant 2014 USD billions.
FIGURE 7: FINANCING GAP FOR GENDER-EQUALITY INTERVENTIONS IN LOW-INCOME COUNTRIES

Note: Data is from Grown et al. (2006), Appendix 5. The graph shows the amount of gender-focused financing needed under different scenarios. All externally financed indicates that there is no contribution of funding from domestic resource mobilization. Small government contribution indicates that the governments commit one percent of public expenditure to gender equality interventions in 2006, scaled up to three percent by 2015. Large government contribution indicates that the share of government resources for gender equality interventions is proportionate to the share of gender-equality interventions in total MDG costs. All values are in constant 2014 USD billions.
<table>
<thead>
<tr>
<th>Source</th>
<th>Description</th>
<th>MDG-2-3</th>
<th>MDG-4-5</th>
<th>All MDGs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• US$9 billion (MDG-2) and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• US$3 billion (MDG-3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>2014 constant US$</strong></td>
<td>US$16 billion</td>
<td></td>
<td>US$67 billion</td>
</tr>
<tr>
<td>Delamonica et al. (2001)</td>
<td><strong>Current US$</strong></td>
<td>US$9.1 billion</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• MDG-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>2014 constant US$</strong></td>
<td>US$12 billion</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• MDG-4-5, and 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>2014 constant US$</strong></td>
<td></td>
<td>US$36 - 51 billion</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• MDG-2</td>
<td>• MDG-5</td>
<td>US$35 - 75 (other MGDs)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• MDG-2</td>
<td>• MDG-5</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>2014 constant US$</strong></td>
<td>US$9 billion</td>
<td>US$26 billion</td>
<td>US$100 billion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• MDG-2 and 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>2014 constant US$</strong></td>
<td>US$11 billion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study</td>
<td>Current US$</td>
<td>2014 constant US$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-------------------------------------------------</td>
<td>-------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grown et al. (2006)</td>
<td>See next column</td>
<td>US$17.8 - 64.1 billion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singh et al. (2009)</td>
<td>US$12.8 billion</td>
<td>• Cost of gender equality interventions (includes MDG2-3-4-5 and gender mainstreaming)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atisophon et al. (2011) and OECD (2012)</td>
<td>US$8.8 billion</td>
<td>US$58.9 billion</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• MDG-2</td>
<td>• MDG-4 and 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2014 constant US$</td>
<td>US$9.2 billion</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>US$14 billion</td>
<td>US$62 billion</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>US$120 billion</td>
<td>US$126 billion</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors' compilation
<table>
<thead>
<tr>
<th>Study</th>
<th>Method of Estimation</th>
<th>Proposed Amount to Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Monetary Fund (2011b)</td>
<td>Precautionary demand for reserves estimated based on (i) imports, (ii) short-term</td>
<td>US$350 - 400 billion annually</td>
</tr>
<tr>
<td></td>
<td>external debt, and (iii) broad money</td>
<td></td>
</tr>
<tr>
<td>Ocampo (2011)</td>
<td>Close to but slightly less than average reserve accumulation in 2003 - 08 (excluding</td>
<td>US$250 - 300 billion annually</td>
</tr>
<tr>
<td></td>
<td>China and Japan</td>
<td></td>
</tr>
<tr>
<td>Stiglitz et al. (2011)</td>
<td>Recommendation based on the previous issue of SDRs equivalent to 250 billion by the</td>
<td>SDR 150 - 250 billion annually over the next three years, which equals US$240 - 400 billion at</td>
</tr>
<tr>
<td></td>
<td>IMF in 2009</td>
<td></td>
</tr>
<tr>
<td>International Monetary Fund (2011a)</td>
<td>Half of the average precautionary demand for reserves over 2000 - 09 (Obstfeld,</td>
<td>US$200 billion annually</td>
</tr>
<tr>
<td></td>
<td>Taylor, and Shambaugh, 2008)</td>
<td></td>
</tr>
<tr>
<td>International Monetary Fund (2010)</td>
<td>Less than average reserve accumulation over 2000 - 09</td>
<td>US$200 billion or more annually for some years</td>
</tr>
<tr>
<td>Kenen (2010)</td>
<td>Recommend &quot;to raise the share of the SDR in total reserves&quot;</td>
<td>SDR 200 billion annually, which equals US$320 billion at current exchange rates</td>
</tr>
<tr>
<td>Williamson (2010)</td>
<td>Annual average increase of the holdings of non-gold reserves 2003 - 08</td>
<td>SDR 457 billion, or more realistically SDR 200 billion annually but asymmetrically</td>
</tr>
<tr>
<td></td>
<td></td>
<td>distributed: approximately 80% of allocations to developing countries, and 20% to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>industrial countries, with allocations within each group determined according to IMF</td>
</tr>
<tr>
<td></td>
<td></td>
<td>quotas</td>
</tr>
<tr>
<td>Greenwald and Stiglitz (2008)</td>
<td>Global reserves were about $3 trillion in 2008. Assuming the demand for reserves</td>
<td>US$200 billion annually</td>
</tr>
<tr>
<td></td>
<td>increases at that average rate of world trade (approximately 7%), this amount would</td>
<td></td>
</tr>
<tr>
<td></td>
<td>satisfy the demand for reserves without a US payments deficit</td>
<td></td>
</tr>
<tr>
<td>Bergsten (2009)</td>
<td>Seen as necessary for a &quot;more balanced composition of global reserve assets&quot;</td>
<td>Annual distributions totaling $1 trillion over the next five years</td>
</tr>
</tbody>
</table>